

# CRITICAL THINKING & PROBLEM SOLVING

Students will apply knowledge and skills in practical ways to solve real world problems. The teacher provides the activities, experiences, and feedback needed for students to develop critical thinking and problem solving skills.

Entry	Developing	Approaching	Ideal/Target
<p><b>Teacher:</b></p> <ul style="list-style-type: none"> <li>disseminates information with limited real world connections.</li> <li>places little emphasis on helping students think analytically, make decisions, and solve problems.</li> </ul>	<p><b>Teacher:</b></p> <ul style="list-style-type: none"> <li>provides direct instruction on critical thinking and problem solving skills.</li> <li>creates opportunities for students to solve basic problems.</li> </ul> <p><b>Students:</b></p> <ul style="list-style-type: none"> <li>use resources including technology to make decisions and solve problems.</li> </ul>	<p><b>Teacher:</b></p> <ul style="list-style-type: none"> <li>incorporates problem and project based learning into instruction.</li> <li>utilizes open-ended question and emphasizes higher order thinking skills.</li> <li>guides and encourages the use of appropriate resources to solve authentic problems.</li> </ul> <p><b>Students:</b></p> <ul style="list-style-type: none"> <li>use technology and work independently to solve problems.</li> <li>engage in open-ended learning experiences that require higher order thinking skills.</li> </ul>	<p><b>Teacher:</b></p> <ul style="list-style-type: none"> <li>creates structures, provides opportunities, and assesses student performances</li> </ul> <p><b>Students:</b></p> <ul style="list-style-type: none"> <li>use multiple resources to plan, design, and execute real-world problems.</li> <li>use technology to collaborate and solve authentic problems.</li> <li>develop and answer open-ended questions using higher order thinking skills</li> </ul>

Critical thinking and problem solving require specific behaviors that ultimately lead to insights and quality decisions. Modern tools that encourage and promote thinking critically and solving problems are flexible, varied and include simulation and data visualization software in addition to the tools included in the Research & Information Fluency and Communication and Collaboration sections.

***How to Use This Document:** Each chart title reflects essential 21st Century skills and collectively embodies a vision of instruction in technology-rich classrooms. Columns are snapshots of student and teacher behaviors in various stages of classroom development. Each column increases in degree of student-centered focus. A progression occurs between columns with the most desired behaviors in the right hand column.*